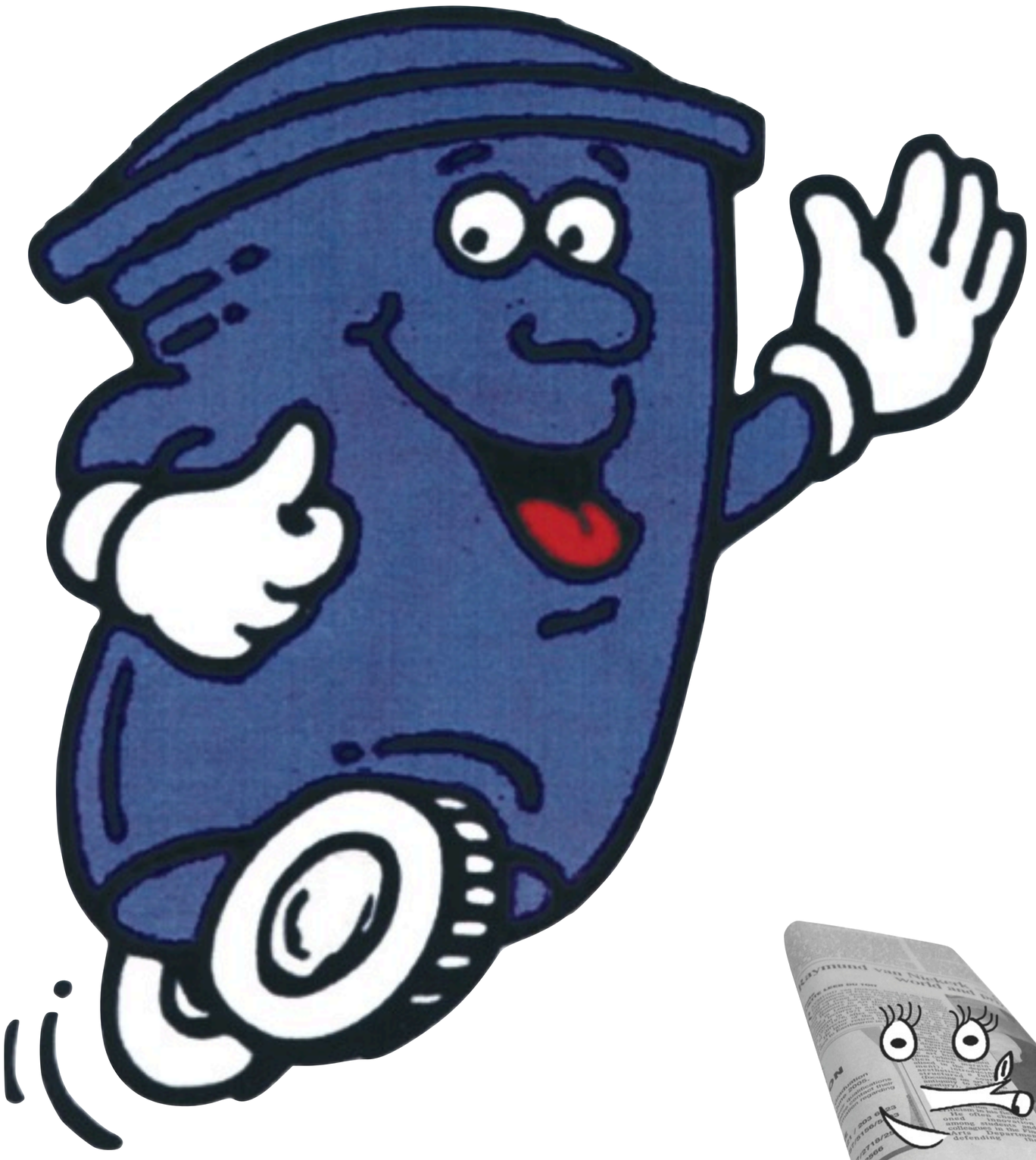
Too Good To Throw Away!

City of Tucson
Recycling Education Program



Pre- & Post-Visit Activity Booklet
Grades 3-5

Dear Teacher,

Welcome to ***Too Good To Throw Away!***, Tucson's recycling education program. ***Too Good to Throw Away!*** is designed for grades 3-5; classroom presentations are available for free to schools located within the Tucson city limits

The goals of *Too Good to Throw Away!* are:

1. To increase participation in recycling in Tucson *(Do More Blue!)*.
2. To reduce recycling contamination (making sure non-recyclable items stay out of the Blue Barrels).
3. To provide engaging activities that meet Arizona Department of Education standards.
4. To instill an environmental ethic in students.

Too Good To Throw Away! is a three-part program that includes:

- A pre-visit activity.
- A 60-minute classroom visit from a presenter.
- Two post-visit activities.

In ***Too Good To Throw Away!***, students become "Blue Sleuths" and learn what it means to Reduce, Reuse, and Recycle. They are also encouraged to "Rethink" what they throw away. They are introduced to four characters representing what we can recycle in Tucson: Paige Paper, Gabby Glass, Mike Metal, and Pete Plastic. These four characters also represent the natural resources that can be recycled again and again to create new products.

How to get the most out of *Too Good To Throw Away!*:

- Do the pre-visit activity with your students *before the classroom presentation*.
- Prepare for the presenter's visit:
  - Coordinate with other teachers to schedule several presentations in a row and reserve **one room** (classroom, library, MPR, etc.).
  - Have a table cleared for presentation materials, with floor space in front where the students can sit.
  - Review Teacher Background Information.
- Do the post-visit activities with your students *after the classroom presentation*.
- Use the "Extension Ideas" listed with the activities to explore how to make recycling an ongoing part of your classroom.

Thank you for teaching ***Too Good To Throw Away!***. This program provides practical knowledge and skills that will help your students make intelligent decisions now and in the future!

Waste Reduction Staff
City of Tucson
Environmental Services
tucsonaz.gov/DoMoreBlue

Do More Blue

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Too Good To Throw Away!

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(These activities can be conducted before or after the classroom presentation.)

Blue Sleuth Activities

Activity #1: Where Trash Goes

Carlo's Day at the Landfill

Overview:

After a trip to the landfill, Carlo learns to reduce, reuse, and recycle the packaging from his lunch. Students listen to the teacher read the story, and then solve a puzzle using recycling vocabulary.

Arizona Department of Education Academic Standards:

Please refer to the Arizona Department of Academic Standards section for the ADE standards addressed by this lesson.

Objectives:

Students will be able to:

- define and use recycling vocabulary
- state that almost half of what we put in our landfill could be reused or recycled
- identify and describe four alternatives to trash disposal: reduce, reuse, recycle, and compost
- explain where our waste goes and describe actions they can take to decrease the amount of waste generated

You will need:

- one photocopy of each of the six recycling vocabulary images
- one photocopy of *Know Your 3Rs Vocabulary* (cut into strips as indicated)
- text of the story: *Carlo's Day at the Landfill*
- *Solve the Puzzle: What Should Carlo Do?* (display using a Smart Board or overhead projector, or copy it onto a chalkboard)
- *Answer Key - Solve the Puzzle: What Should Carlo Do?*
- *Teacher Notes on Carlo's Day at the Landfill*

Directions: (estimated time 60 minutes)

1. Introduction

- Write the six recycling vocabulary words on the board.
- Tell the students that this activity will prepare them for a recycling presentation called *Too Good To Throw Away!*

2. Read *Carlo's Day at the Landfill*

Before reading the story, tell the students that there is a puzzle within the story that they will try to solve. Ask the students to listen carefully while you read the story. When they hear any of the six vocabulary words, they should raise their hand. Distribute one of the six images and the accompanying definitions to the first six students who hear the words in the text of the story. At the end of the story, have each student holding a recycling image stand up, show the class their image, and read the definition on the strip of paper. You may want to ask students to give their own examples for each word.

(continued on next page)

Activity #1: Where Trash Goes
Carlo's Day at the Landfill

(continued)

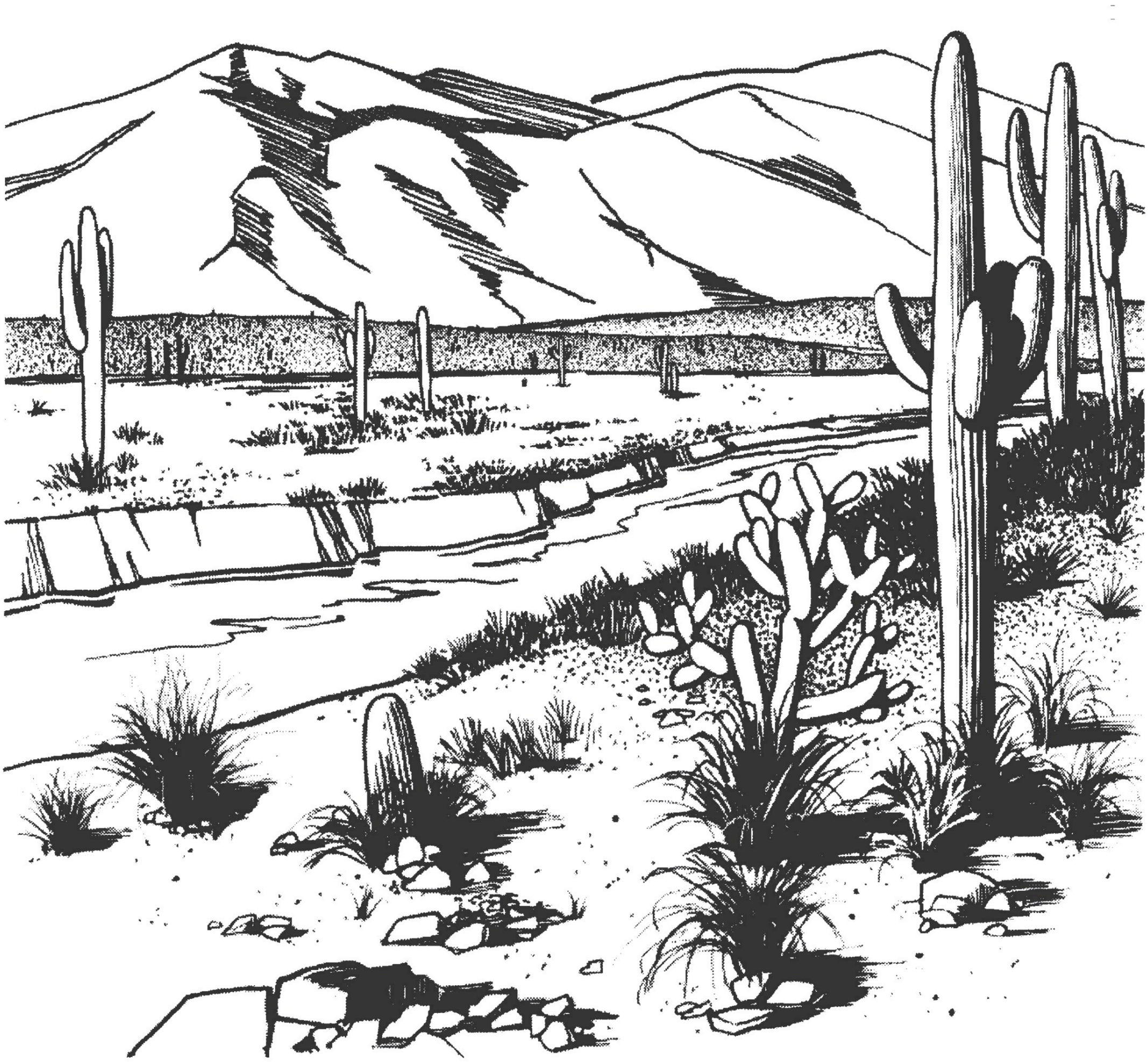
3. Solve the Puzzle

Using a SmartBoard or overhead projector to display *Solve the Puzzle: What Should Carlo Do?,* ask students: *What could Carlo do differently to avoid throwing valuable natural resources in the landfill?* Work through the list and explore various options for each item. Make a star in the boxes corresponding with appropriate choices. (For some items, there will be more than one appropriate option.) Refer to *Answer Key* and *Teacher Notes*. Make the point that we do have other choices! Then help students choose the *best* option for each item. Circle that star. After completing the chart, be sure to wrap up by discussing:

- Why is it important for Carlo—and us!—to recycle? Emphasize the importance of saving natural resources. Discuss how our lives would be different if our supply of various resources became depleted.
- What other options are more desirable than throwing resources away?
- Review the items on the list and differentiate between renewable and non-renewable items. Explain that even if a resource is renewable, it still may be limited (i.e., it takes many years for a tree to grow to maturity).
- How can students reduce the amount of trash from their own lunches?

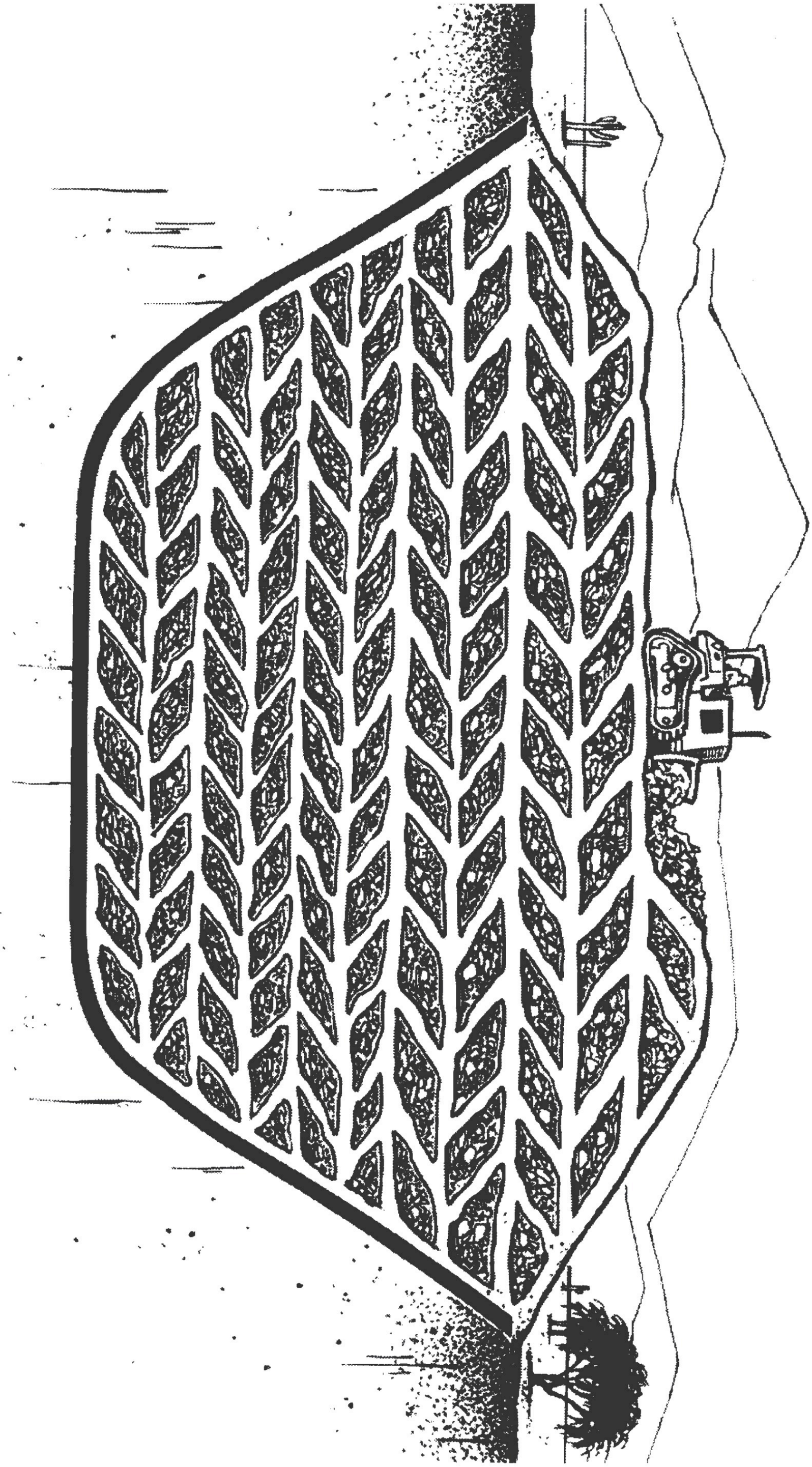
Extension Ideas:

- As a research project, students could select an item from Carlo's lunch and trace it back to its natural origins. Guide students to the important conclusion that all things come from natural resources.
- Plan a zero waste lunch.

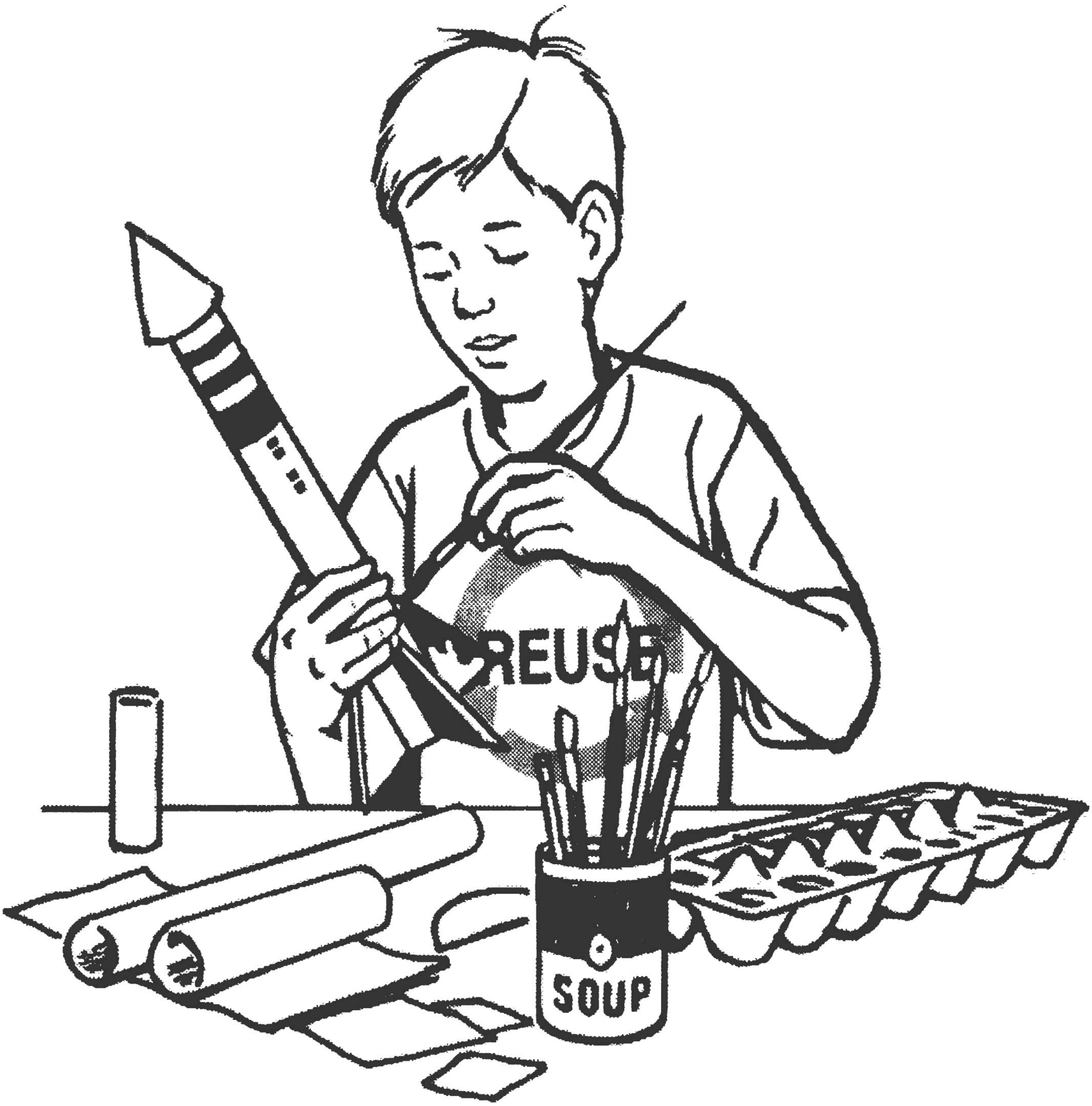


natural resources

Tarantula



reduce



reuse

recycle

compost

Know Your 3Rs Vocabulary

Note to Teachers: Copy on card stock if available and cut along dotted lines.

Natural Resources ***(noun)***: Raw materials and energy that we get from nature; land, water, trees, sunshine and minerals. Everything comes from natural resources. For Example, this piece of paper came from a tree.

Landfill (***noun***): The place where trash is taken and buried in a special pit lined in plastic. Almost half of the things that end up there could have been reused, composted, or recycled.

Reduce (***verb***): To buy or use fewer items or to throw away less trash. For example, you can use a cloth bag repeatedly instead of a plastic bag to carry home groceries.

Reuse (***verb***): To save something and use it over and over again for the same purpose or another purpose. For example, you could make a toy rocket our of old paper towel rolls.

Recycle (***verb***): To make something used into something new. When you run out of things to do with your cans and newspapers, you can recycle them so they go to companies that make new things from them. A recycled newspaper can be made into another newspaper or comic book.

Compost (***verb/noun***): To compost is a way to recycle food scraps and yard waste. You can compost things that were once part of a living plant. Banana peels, coffee grinds, grass clippings and leaves can all go into a compost pile to eventually turn into rich soil.

Carlo's Day at the Landfill

After a trip to the landfill, Carlo learns to reduce, reuse, and recycle the packaging from his lunch.

Carlo loves field trips. Today was going to be especially cool: his 5th grade class was going to the Los Reales Landfill. On the bus, Carlo and his friend Jill talked about the awesome things they might find at the landfill: old bikes, video games, comic books, and maybe even some unopened bags of cookies.

"Speaking of cookies, what do you have for lunch?" Jill asked.

Carlo looked into his brown paper lunch bag. He pulled out a piece of pizza wrapped in aluminum foil, a plastic container full of applesauce, a plastic spoon, an aluminum can of soda, a banana, and a bag of potato chips.

"Trade you an apple for your chips," offered Carlo's friend.

"No way," answered Carlo. "Hey look! We're at the landfill!"

It was huge! It was the size of nearly 300 football fields put together. But it wasn't as cool as they had expected. There was trash everywhere, and lots of it: plastic bags, old food, broken couches, boxes, paper, and more.

"Peeeuuwww!" said Jill. "This place stinks!"

Once they were off the bus, Ms. Ortiz talked to their class about the landfill. "This is where the garbage trucks come after they leave your house," she explained.

"Who cleans landfills up?" Jill asked.

"Nobody cleans them up," Ms. Ortiz answered. "That's the problem. We just cover them up and dig another big hole. Once trash is buried in the landfill it lasts for a long time. That's why it's best if we can find ways to throw out less trash."

"You mean by recycling?" asked another student.

"That's a great way," agreed Ms. Ortiz. "Do you see that newspaper over there? It could have been recycled into another newspaper. But instead, somebody just threw it out, and now we have to use more natural resources, like trees, to make more paper. Almost half of the things in the landfill could have been reused, composted, or recycled."

"Wow!" Carlo said. "Half of these things didn't have to end up here."

Ms. Ortiz pointed to the desert full of trees, cacti, and birds. "Once this landfill cell is full, we're going to dig a new one over there. That's why today I want to teach you how to reduce, reuse, recycle, and compost—so we don't have as much trash to bury."

After the visit to the landfill, the class ate lunch at the park. When Carlo finished his lunch, he was about to throw the whole bag into the trashcan. But then he remembered what Ms. Ortiz said about reducing, reusing, recycling, and composting.

He looked down at his brown paper bag, at the aluminum foil, banana peel, plastic spoon, plastic applesauce container, aluminum soda can, and chip bag. Instead of sending it all to the landfill, Carlo made a plan, took his lunch bag home, and only threw away one of the seven things from his lunch. WHAT DO YOU THINK CARLO DID WITH THE OTHER SIX THINGS?

Solve the Puzzle: What Should Carlo Do?

	REDUCE	REUSE	RECYCLE	COMPOST	THROW OUT
1. Brown Paper Bag					
2. Aluminum Foil					
3. Applesauce Container					
4. Plastic Spoon					
5. Soda Can					
6. Banana Peel					
7. Potato Chip Bag					

Answer Key

Solve the Puzzle: What Should Carlo Do?

	REDUCE	REUSE	RECYCLE	COMPOST	THROW OUT
1. Brown Paper Bag	★ use a durable lunch box or a cloth bag	★	★	★	
2. Aluminum Foil	★ use a durable container	★			
3. Applesauce Container	★ fill a durable container from large jar	★ use in craft projects, etc.	★		
4. Plastic Spoon	★ use a metal spoon	★	★		
5. Soda Can	★ use a durable container for juice		★		
6. Banana Peel				★	
7. Potato Chip Bag	★ fill a durable container from large bag				

Teacher Notes on *Carlo's Day at the Landfill*

Carlo realized that there were many different things he could have done to reduce the amount of trash that he produced, but here's what he actually did.

1. Carlo learned that he could **recycle** his brown lunch bag rather than toss it in the trash. But he noticed that the bag was still clean, so he decided to reuse it for the rest of the week. Then he used it to carry fruit peels out to the **compost** pile, since it could be composted too. A few weeks later, he realized that he could go further to **reduce** this waste. Instead of using a brown paper bag every week, he asked his parents to buy him a cool lunch container that would last for years.

2. Carlo realized he could rinse off the aluminum foil and **reuse** it. Later it occurred to him that he could further **reduce** waste by putting his pizza and sandwiches in a durable, washable plastic container.

3. Carlo knew he could **recycle** the applesauce container. He also realized that he could **reuse** his applesauce cups to hold pennies and small toys. He even used a bunch of them to build forts with walls and towers. But Carlo really liked applesauce, and he soon realized that it would be quite a challenge to reuse all his applesauce cups. So to **reduce** his waste further, he convinced his dad to buy large jars of applesauce; then, when they packed his lunch, they spooned an individual serving into a small durable plastic container that could be easily washed.

4. At first, Carlo washed his plastic spoon with soap and water so he could **reus**e it. The spoon would eventually break, and Carlo would **recycle** it, but then he would need to use a new plastic spoon. So, Carlo took a further step to **reduce** waste by carrying a regular metal spoon with his lunch.

5. Everyone knows that it is better to **recycle** an aluminum soda can than to throw it away. Soda cans are hard to reuse! But Carlo liked apple juice and orange juice as much as he liked soda. His family started buying cans of frozen juice concentrate to mix with water, because this involves less packaging waste than buying juice in other ways. Carlo dug a thermos out of the back of the kitchen cabinet. Each day he washed and refilled it from the big jar of juice in the fridge.

6. Carlo got an okay from his neighbor to start putting banana peels (and orange peels and apple cores too) in the neighbor's **compost** pile. Carlo liked the idea of composting his banana peels instead of letting them sit useless in a landfill. (When the neighbor gave Carlo's family green chilies and calabasas (squash) from the garden, it was interesting to think that this tasty food was grown with bits of Carlo's old fruit peels.)

7. Finally, because he knew it could not be recycled, Carlo threw away the potato chip bag. But avoiding putting things in the **landfill** had become a game to him. So sometimes he still took chips in his lunch, and sometimes he took tasty crackers. But to **reduce** waste, he convinced his dad to buy crackers and chips in big boxes and bags. Carlo then packed these in his lunch in a reusable plastic bag or even a plastic container to keep them from getting crushed.

Blue Sleuth Activities

Activity #2: What You Can Recycle

Recycling Scavenger Hunt

Overview:

Students identify different recyclables in their home and share findings in class.

Arizona Department of Education Academic Standards:

Please refer to the Arizona Department of Academic Standards section for the ADE standards addressed by this lesson.

Objectives:

Students will be able to:

- identify recyclables in their home
- distinguish between materials such as plastics, metals, glass, and paper
- describe how they can contribute to their home's recycling efforts

You will need:

- photocopies of the two-sided *Recycling Scavenger Hunt* sheet for each student

Directions: *(estimated time 30 minutes of homework followed by 30 minutes of class time)*

1. Explain Homework Assignment

- Hand out the two-sided *Recycling Scavenger Hunt* sheet to each student.
- Review the instructions and answer any questions.
- Encourage students to record recyclables as specifically as possible.
- Students share findings in class the following day.
- Remember to stress safety issues as they look for recyclables.

2. Share Findings*

- Ask students to recount their adventures at home and list their findings. The following questions may generate interesting discussions:
  - What plastics did you find? Were they all recyclable?
  - Did you find things in the trash that could be recycled?
  - Does anybody's family compost? If so, please describe the process.
  - Whose family recycles? Who has a blue recycling barrel? Who uses a Neighborhood Recycling Center?
  - Brainstorm ways that students in different situations could help to organize recycling in their home.

**Point out that the students' scavenger hunt lists could be kept as mini-recycling directories at home!*

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Activity #2: What You Can Recycle
Recycling Scavenger Hunt

(continued)

If there are questions about what can or cannot be recycled, call the Recycling Info Line at (520) 791-5000 or visit our website at tucsonaz.gov/DoMoreBlue.

Extension Idea:

- Have students bring in one piece of trash, food, or recycled item, and tell its story as a show-and-tell. Where did it come from? Where will it go?

Name:_____

Recycling Scavenger Hunt

Directions: Look for materials at home that can be recycled instead of thrown in the trash. Remember to be careful handling bottles and cans and wash your hands when you're done. The kitchen is a great place to start! Once you find something that fits into one of these boxes, write it down and see if you can find four items for each box! Two examples are given. Try to be as specific as possible. (If you are not sure where or if something fits, look on the back of this paper for hints.)

Paige Paper	Gabby Glass	Mike Metal
1._____	1._____	1.Soup can
2._____	2._____	2._____
3._____	3._____	3._____
4._____	4._____	4._____

Pete Plastic	Compost
1._____	1.Banana peel
2._____	2._____
3._____	3._____
4._____	4._____

Question: Do you have a Blue Barrel where you live? _____

(To order a Blue Barrel or to find the location of the nearest Neighborhood Recycling Center, call (520) 791-5000 or visit our web site at tucsonaz.gov/DoMoreBlue.)

Recycling Scavenger Hunt Hints

Paige Paper

HINT: Paper can be white paper, colored paper, mail, newspapers, magazines, phonebooks or brown paper bags. *(Paper plates, paper cups, and paper towels and tissue cannot be recycled.)*

Gabby Glass

HINT: Clear, green, brown, and other colored glass bottles and jars are great, *but windows, light bulbs, mirrors and glasses don't count!*

Mike Metal

Aluminum

HINT: This is a light metal, with a silvery color. You can find these. Don't foil the scavenger hunt here! Aluminum cans can be recycled.

Tin/Steel

HINT: This is a heavier metal than aluminum. It is magnetic. It can be used to spray flowery scents in the bathroom, or to hold some foods like soup and beans.

Pete Plastic

HINT: Here in Tucson, we can recycle all types of plastic. Water bottles, milk jugs, plastic tubs, and lots of other plastic items can all be recycled in the new Material Recovery Facility (MRF). *(Don't forget – no plastic bags in the Blue Barrel!)*

Compost*

HINT: *Please don't put compost in the recycling cart!* This organic plant matter (like peels, apple cores, and old bread) turns into soil if put in a compost pile.

**If you don't have a compost pile at your house, then these things must be bagged and tied and put in the garbage can.*

Remember when recycling, all items should be clean, dry, and empty.

Blue Sleuth Activities

Activity #3: What You Can Do

What a Load of Garbage!

Overview:

Students focus on waste generated in the classroom and elsewhere in the school, and use mathematical calculations to estimate the amount produced by their school and by all schools in Arizona.

Arizona Department of Education Academic Standards:

Please refer to the Arizona Department of Academic Standards section for the ADE standards addressed by this lesson.

Objectives:

Students will be able to:

- realize the total amount of trash generated by their class.
- apply math skills to estimate trash totals for their school and beyond.
- identify ways to reduce waste in the classroom and elsewhere.

You will need:

- plastic bag(s) large enough to hold the trash generated by the class in one school day
- scale (hanging scale or simple bathroom scale)
- *Trash Pile* master (display using a Smart Board or overhead projector, or copy it onto a chalkboard)
- the number of student attendance days in your school calendar

Directions: *(estimated time 60 minutes)*

1. Collect and save all trash in a typical school day.

You may choose to focus on classroom trash or to include additional rooms such as the art and lunch rooms. (Store food waste in a separate container, if possible in a refrigerator overnight or until you are ready to conduct the activity.)

2. A World of Waste

As discussed in the Teacher Background Information, point out that the U.S. leads the world in the production of municipal solid waste. Because the U.S. accounts for only a small percentage of the world's population, this means we produce several times as much waste per person as do people in other countries. Even compared to other wealthy, developed nations, we typically produce twice as much waste per person. The average U.S. citizen produces over 4.5 pounds of trash every day! Expand these points as you wish.

3. We are what we throw away!

Remind students that the waste they throw away every day includes trash they generate at school. Weigh the bag(s) of trash collected on the previous day. If using a bathroom scale, show students how a person's weight can be subtracted from the weight of that person holding the trash to arrive at the weight of trash. Write the total pounds of trash on the board.

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Activity #3: What You Can Do

What a Load of Garbage!

(continued)

4. *Trash Pile* Math

Ask students to find out how much trash the average student produces by dividing the total by the number of students in the class. Use the *Trash Pile* chart to guide students in projecting the amount of trash produced by their classroom, their school, and all elementary schools in Arizona in the course of one school year. Students should discover that there might be more than one way to arrive at certain answers. Note that a Teacher Version of the *Trash Pile* chart is also provided.

5. Discussion

Ask students:

- Do you think our class generates a lot of trash?
- What might we do to reduce the amount of trash generated?
- As students brainstorm, write their ideas on the board.
- After a list of several items has been created, lead the class into agreement on which strategies would make the most difference and prioritize the list.
- Then take concrete steps to set these strategies in motion. For example, if "use back of old homework for scratch paper" is listed, set up a basket or box for the class to collect and access homework that is clean on one side. If "create a classroom recycling program" is listed, set up an appropriate container and collection schedule.

Extension Ideas:

- Extend your classroom waste reduction efforts to the school. Students may wish to write letters or make presentations to enlist the support of the school administration and parent-teacher organization.
- Have students analyze their family's household trash and develop strategies for reducing waste in the home as well.
- Sign up for the national school recycling competition at recycle-bowl.org and enter towin p rizes for your school.

Trash Pile
Master

The Classroom	The School	Schools in Arizona
A Amount of trash per day = _____ Pounds. (This answer is the weight measured by the class. Use it to calculate other answers.)	E Amount of trash per day = _____ Pounds.	I Amount of trash per day = _____ Pounds.
B Amount of trash per 5 day week = _____ Pounds.	F Amount of trash per 5 day week = _____ Pounds.	J Amount of trash per 5 day week = _____ Pounds.
C Amount of trash per month = _____ Pounds.	G Amount of trash per month = _____ Pounds.	K Amount of trash per month = _____ Pounds.
D Amount of trash per year = _____ Pounds.	H Amount of trash per year = _____ Pounds.	L Amount of trash per year = _____ Pounds.

Trash Pile
Teacher Version

The Classroom	The School	Schools in Arizona
A Amount of trash per day = _____ Pounds. **This answer is the weight measured by the class.**	E Amount of trash per day = _____ Pounds. **A x (number of classes in your school)**	I Amount of trash per day = _____ Pounds. **E x (2,369 schools in Arizona)**
B Amount of trash per 5 day week = _____ Pounds. **A x 5**	F Amount of trash per 5 day week = _____ Pounds. **E x 5**	J Amount of trash per 5 day week = _____ Pounds. **I x 5**
C Amount of trash per month = _____ Pounds. **B x 4**	G Amount of trash per month = _____ Pounds. **F x 4**	K Amount of trash per month = _____ Pounds. **J x 4**
D Amount of trash per year = _____ Pounds. **A x (number of days in school year)**	H Amount of trash per year = _____ Pounds. **E x (number of days in school year)**	L Amount of trash per year = _____ Pounds. **K x (number of days in school year)**

Teacher Background Information

A World of Waste

What is solid waste? What is solid waste? Also referred to as trash, rubbish, refuse, or garbage, solid waste means waste material that is not liquid or gas. These lessons focus on municipal solid waste (MSW), which includes household, commercial and institutional waste, but not wastes from mining, agriculture, silviculture, demolition debris, and a variety of sludges. The term "waste" has interesting connotations. It can refer to something leftover or something not used wisely. Much that is considered waste could actually be used wisely.

Solid waste is a serious issue in the United States. The U.S. leads the world in the production of municipal solid waste. Even compared to other wealthy industrialized nations such as Japan or countries in Europe, we generate twice as much solid waste per capita. The average American produces about 4.5 pounds of garbage each day! In 1960, that figure was 2.6 pounds. Every year in the United States, we generate 250 million tons of garbage. That's enough trash to cover the state of Arizona 5 times!

Recycling has been growing steadily for over 30 years. From 1980 to 1990, the U.S. almost doubled its recycling rate from 9 percent to 17 percent. In 1995, our country's average recycling rate was over 25 percent, and by 2010, it was approximately 34 percent. At Tucson's Los Reales landfill, more than 1,500 tons of garbage arrive every day, much of it recyclable. Tucson's recycling rate has increased from 9% to 23%.

A new state of the art Materials Recovery Facility (MRF) opened in July 2012, allowing us to recycle a wider variety of material than ever before – especially plastics. Now we can handle all seven types of recyclable plastics.

Recycling is much more than an alternate means of waste disposal. Recycling is about conserving natural resources, reducing our use of energy and materials, minimizing pollution, and more.

What are the "Three Rs"?

In a waste reduction context, the "Three Rs" refer to reduce, reuse, and recycle. These are the three most basic, important ways to reduce waste, conserve natural resources, and decrease our impacts on the natural world. Reducing, reusing, and recycling often save money, too.

It is important to recognize that the order cited — reduce, reuse, recycle—is not arbitrary. Some people tend to think of recycling as a central focus and of reducing and reusing as less important, but this is not a correct understanding. Reducing is actually the most efficient way to conserve resources. Reusing is second in efficiency. Recycling is important, but is not as efficient as reducing and reusing. Recycling of course involves a cycle. For recycling to be successful, we need to complete the cycle, or "close the loop," by buying recycled goods.

Although confusing, it's important to learn to distinguish between the "made from recycled" symbol, which is a trio of light chasing arrows on a dark circle background, from the "recyclable" symbol, which is a simple trio of chasing arrows, with no dark background. A "made from recycled" product is actually made from materials that have been used before.

The Three Rs

REDUCE

To buy or use fewer items or to throw away less trash.

- Prevent waste; buy only what you really need.
- Purchase products you use regularly in large packages.
- Purchase products in less packaging.
- Purchase concentrates and bulk goods.
- Buy products in refillable packaging.
- Borrow, loan, rent, lease, or share when possible (books, tools, etc.).
- Use both sides of paper.
- Take action to get your name deleted from mailing lists.
- Repair instead of replace something broken or worn.
- Buy good quality, durable products fabricated so that they can be repaired.
- Take good care of your things so that they last.

REUSE

To save something and use it over again for the same purpose or another purpose.

- Choose reusable rather than disposable goods (napkins, mugs, razors, sponges, etc.).
- Purchase used goods (furniture, books, music, toys, clothes, etc.).
- Sell or give away goods you no longer want or need.
- Use the back of old paper as scratch paper.
- Use glass jars, plastic tubs, water bottles, lunch bags, etc. again and again.
- Use leftover materials to make something different (scrap lumber to build a bat house or doll house).

RECYCLE

To make something used into something new.

- Recycle as much as possible through community collection programs, either curbside or at drop-off locations.
- Adjust your purchasing habits to buy items in packages that are recyclable in your area.
- Keep an eye out for special recycling programs, such as opportunities to recycle copier or computer printer cartridges through an office supply store and Christmas tree collection programs.
- Remember to buy recycled! Look for products and packaging with recycled content.
- Help “nature’s recycling” by composting kitchen and yard waste.

Do More Blue

Do More Blue [EVERYDAY]

Discover all you can Blue at tucsonaz.gov/esd

1. PLASTIC (PETE) BOTTLES

2. PLASTIC CONTAINERS

3. PLASTIC (HDPE) BOTTLES AND JUGS

4. CORRUGATED CARDBOARD
5. BROWN PAPER BAGS
6. NEWSPAPERS

7. PAPERBOARD
8. MOLDED FIBERBOARD

9. MAGAZINES AND CATALOGS
10. NOTEBOOKS AND PHONEBOOKS

12. ALUMINUM CANS
13. STEEL / TIN CANS

14. RIGID PLASTICS

11. GLASS FOOD AND BEVERAGE BOTTLES AND JARS

15. MILK CARTONS AND DRINK BOXES

16. PRINTING AND WRITING PAPER
17. MAIL AND COPY PAPER
18. BROCHURES AND OTHER PAPER

AND PLEASE, NO PLASTIC BAGS, BUBBLE WRAP OR STYROFOAM!™

CITY OF TUCSON ENVIRONMENTAL SERVICES
WWW.TUCSONAZ.GOV/ESD

The success of the *Do More Blue* program depends on two factors:

- **Quality** of the recycled materials, and
- **Efficiency** of the collection.

It is the responsibility of each homeowner to follow these recommendations which allow for the best separation and eventual use of the recycled materials.

Unacceptable Materials:

- Plastic bags
- Grass
- Yard waste
- Styrofoam
- Food waste
- Diapers
- Clothing
- Aluminum foil
- Hazardous waste

Guidelines for Blue Barrel Recycling

- Please make sure materials are clean, empty and dry.
- Set out your Blue Barrel for collection when it is more than half full to decrease fuel consumption and air pollution.
- Have barrel at curb by 6 a.m. to ensure service.
- Leave labels on containers.
- Bottle and jar caps and lids can be recycled.
- Lightly rinse food containers. Use water wisely - throw very dirty items into the garbage.
- All recyclables go loose into the Blue Barrel, together - no sorting! Please put them in individually, not inside a box or bag.
- Do not flatten cans and bottles to ensure sorting equipment works properly.
- Cut or flatten corrugated cardboard boxes to fit in container. Remove plastic wrapping and liners.
- Shredded paper may be recycled in the Blue Barrel if it is secured in a clear plastic bag.
  (NOTE: This is the only time that plastic bags can go in the recycling container.)

Too Good to Throw Away!
Vocabulary

Blue Barrel: The plastic container used for curbside recycling in the *Do More Blue* program.

Compost: Recycling food scraps and yard waste to create new soil through decomposition.

Do More Blue: Part of City of Tucson Environmental Services' waste management program focusing on recycling. The *Do More Blue* program provides Blue Barrels for co-mingled, curbside recycling in the City of Tucson; in addition, large blue containers are available for recycling at businesses and Neighborhood Recycling Centers. For more information go to tucsonaz.gov/DoMoreBlue or call (520) 791-5000.

Downcycle: To convert waste materials into new materials or products of lesser quality. For example, white notebook paper is often downcycled into cardboard.

Landfill: A large pit lined with plastic where trash is taken and covered with soil.

Los Reales Landfill: The landfill for the residents and businesses of Tucson and Pima County. Each day approximately 1,500 tons of solid waste is brought to the 350-acre landfill, located at 5300 E. Los Reales Road (between Swan and Craycroft Roads). For more information go to tucsonaz.gov/es/los-reales-landfill.

Materials Recovery Facility: A Materials Recovery Facility (MRF), pronounced "murf," is the facility where recyclable materials are taken to be separated and prepared to be made into new products.

Natural Resources: Raw materials and energy from nature: land, water, sunshine, and minerals. Everything comes from natural resources.

Neighborhood Recycling Center: Even if you don't have a Blue Barrel, you can recycle at one of 13 Neighborhood Recycling Centers located throughout Tucson. Locations can be found at tucsonaz/gov/es/neighborhood-recycling-center.

Non-renewable natural resources: Materials that are considered finite in amount (e.g., petroleum, coal, copper), or exhaustible because of their scarcity, the great length of time required for their formation, or their rapid depletion.

ReCommunity–Tucson: The new MRF for the City of Tucson (opened July 2012), located at 3780 E. Ajo Way (near the intersection with Alvernon Way). For more information go to www.recommunity.com.

Recycle: To make something used into something new.

(continued on next page)

Too Good to Throw Away!

Vocabulary

(continued)

Reduce: To buy or use fewer items or to throw away less trash.

Renewable natural resources: Materials that can be renewed, restored, or regenerated by natural ecological cycles or sound management practices. Examples include plants, animals and sunlight.

Reuse: To save something and use it over again for the same purpose or another purpose.

Single Stream Recycling: Recyclables that are collected mixed together, rather than separate from one another. In Tucson, all recyclable materials are placed together in the Blue Barrel, then sorted at the MRF.

Solid waste: More commonly known as trash or garbage; consists of everyday items we use and then throw away, such as product packaging, grass clippings, furniture, clothing, bottles, food scraps, newspapers, appliances, paint, and batteries.

Three Rs (3Rs): Reduce, Reuse, Recycle

Upcycle: To convert waste materials into new materials or products of better quality. For example, foil juice pouches can be upcycled to make handbags and backpacks.

Waste Stream: The total amount of waste that is thrown away.

Arizona Department of Education Academic Standards

The *Too Good to Throw Away!* program for grades 3-5 addresses the following Academic Standards. (Complete versions of the Academic Standards are available at http://www.azed.gov/standards-practices/.)

SCIENCE STANDARDS	ACTIVITY #1	ACTIVITY #2	ACTIVITY #3	PRESENTATION
SC03-S1C1-01 Formulate relevant questions about the properties of objects, organisms, and events of the environment using observations and prior knowledge.	✓	✓		✓
SC03-S1C2-04 Use metric and U.S. customary units to measure objects.			✓	
SC03-S1C2-05 Record data in an organized and appropriate format (e.g., t-chart, table, list, written log).	✓	✓	✓	
SC03-S3C1-02 Describe the beneficial and harmful impacts of natural events and human activities on the environment (e.g., forest fires, flooding, pesticides).				✓
SC03-S6C1-06 Describe ways humans use earth materials (e.g., fuel, building materials, growing food).				✓
SC04-S1C2-04 Measure using appropriate tools (e.g., ruler, scale, balance) and units of measure (i.e., metric, U.S. customary).			✓	
SC04-S1C2-05 Record data in an organized and appropriate format (e.g., t-chart, table, list, written log).	✓	✓	✓	
SC04-S3C1-01 Describe how natural events and human activities have positive and negative impacts on environments (e.g., fire, floods, pollution, dams).				✓
SC04-S3C1-02 Evaluate the consequences of environmental occurrences that happen either rapidly (e.g., fire, flood, tornado) or over a long period of time (e.g., drought, melting ice caps, the green house effect, erosion).				✓
SC04-S3C2-02 Describe benefits (e.g., easy communications, rapid transportation) and risks (e.g., pollution, destruction of natural resources) related to the use of technology.				✓
SC04-S4C3-01 Describe ways various resources (e.g., air, water, plants, animals, soils) are utilized to meet the needs of a population.				✓

SCIENCE STANDARDS (CONT.)	ACTIVITY #1	ACTIVITY #2	ACTIVITY #3	PRESENTATION
SC04-S4C3-02 Differentiate renewable resources from nonrenewable resources.	✓			✓
SC04-S4C3-03 Analyze the effect that limited resources (e.g., natural gas, minerals) may have on an environment.	✓			✓
SC04-S4C3-04 Describe ways in which resources can be conserved (e.g., by reducing, reusing, recycling, finding substitutes).	✓	✓	✓	✓
SC05-S1C2-04 Measure using appropriate tools (e.g., ruler, scale, balance) and units of measure (i.e., metric, U.S. customary).			✓	
SC05-S1C2-05 Record data in an organized and appropriate format (e.g., t-chart, table, list, written log).	✓	✓	✓	
SOCIAL STUDIES STANDARDS				
SS03-S3C4-02 Describe the importance of students contributing to a community (e.g., service projects, cooperating, volunteering).	✓	✓	✓	✓
SS03-S4C2-02 Describe how physical and human characteristics of places change from past to present.				✓
SS03-S4C3 Correlates with SC03-S3C1.				✓
SS03-S4C5-01 Identify ways (e.g., farming, building structures and dams, creating transportation routes, overgrazing, mining, logging) in which humans depend upon, adapt to, and impact the earth.	✓			✓
SS03-S4C5-02 Describe ways of protecting natural resources.	✓	✓	✓	✓
SS03-S4C5-03 Identify resources that are renewable, recyclable, and non-renewable.	✓	✓	✓	✓
SS03-S5C1-01 Identify how scarcity requires people to make choices due to their unlimited wants and needs.	✓	✓	✓	✓
SS03-S5C1-06 Discuss how producers use natural, human, and capital resources to create goods and services.				✓

SOCIAL STUDIES STANDARDS (CONT.)	ACTIVITY #1	ACTIVITY #2	ACTIVITY #3	PRESENTATION
SS04-S3C4-01 Discuss ways an individual can contribute to a school or community.	✓	✓	✓	✓
SS04-S4C3 Correlates with SC04-S3C1 and SC04-S4C3.	✓			✓
SS04-S4C5-01 Describe human dependence on the physical environment and natural resources to satisfy basic needs.	✓	✓	✓	✓
SS04-S4C5-03 Describe the impact of human modifications (e.g., dams, mining, air conditioning, irrigation, agricultural) on the physical environment and ecosystems.	✓			✓
SS05-S3C4-01 Describe ways an individual can contribute to a school or community.	✓	✓	✓	✓
MATH STANDARDS				
3.OA.1 Interpret products of whole numbers.			✓	
3.OA.2 Interpret whole-number quotients of whole numbers.			✓	
3.OA.5 Apply properties of operations as strategies to multiply and divide.			✓	
3.OA.7 Fluently multiply and divide within 100.			✓	
3.NBT.2 Fluently add and subtract within 1000.			✓	
4.OA.1 Interpret a multiplication equation as a comparison.			✓	
4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.			✓	

MATH STANDARDS (CONT.)	ACTIVITY #1	ACTIVITY #2	ACTIVITY #3	PRESENTATION
4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers.			✓	
4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors.			✓	
5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm.			✓	
5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors.			✓	
SPEAKING AND LISTENING STANDARDS				
3.SL.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacherled) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.	✓	✓	✓	✓
3.SL.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.	✓	✓	✓	✓
4.SL.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacherled) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.	✓	✓	✓	✓
5.SL.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacherled) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.	✓	✓	✓	✓

Teacher Note: Pursuing the suggested Extension Ideas at the end of the pre- and post-visit activities will allow you to address additional ADE standards in a variety of subject areas.

Do More Blue

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